

Subj 21 --17 (New) A process for mechanical chemical polishing in the integrated circuits industry, comprising rubbing a layer with a support impregnated with an abrasive composition, wherein

said layer is (1) a material selected from the group consisting of silicon oxide, silicon nitride, and a polymer having a low dielectric constant, or (2) one layer of silicon oxide and another layer of silicon nitride, and

said abrasive composition comprises an aqueous acid suspension of

(i) individualized colloidal silica particles not linked to each other by siloxane bonds,
C1 together with (ii) a surfactant.--

Add the following new claims:

--18. (New) The process of claim 17, wherein said surfactant is an anionic or non-ionic surfactant.

--19. (New) The process of claim 18, wherein said surfactant is anionic.

Subj 21 --20 (New) The process of claim 19, wherein said rubbing is carried out with said composition at pH between 1 and 5, and

said individualized colloidal silica particles have diameters between 12 nm and 100 nm.

--21. (New) The process of claim 18, wherein said rubbing is carried out with said composition at pH between 1 and 5, and

 said individualized colloidal silica particles have diameters between 12 nm and 100 nm.

--22. (New) The process of claim 17, wherein said rubbing is carried out with said composition at pH between 1 and 5, and

 said individualized colloidal silica particles have diameters between 12 nm and 100 nm.

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--23. (New) The process of claim 22, wherein said pH is between 2 and 3, and

 said particle size is between 35 and 50 nm.

--24. (New) The process of claim 21, wherein said pH is between 2 and 3, and

 said particle size is between 35 and 50 nm.

--25. (New) The process of claim 20, wherein said pH is between 2 and 3, and

 said particle size is between 35 and 50 nm.

--26. (New) The process of claim 25, wherein the concentration by weight of said individualized colloidal silica particles is between 25 and 35 % in said aqueous acid suspension.

--27. (New) The process of claim 24, wherein the concentration by weight of said individualized colloidal silica particles is between 25 and 35 % in said aqueous acid suspension.

--28. (New) The process of claim 23, wherein the concentration by weight of said individualized colloidal silica particles is between 25 and 35 % in said aqueous acid suspension.

--29. (New) The process of claim 22, wherein the concentration by weight of said individualized colloidal silica particles is between 25 and 35 % in said aqueous acid suspension.

--30. (New) The process of claim 21, wherein the concentration by weight of said individualized colloidal silica particles is between 25 and 35 % in said aqueous acid suspension.

--31. (New) The process of claim 18 wherein the volumetric concentration of said surfactant is between 0.001% and 5%.

--32. (New) The process of claim 20 wherein the volumetric concentration of said surfactant is between 0.001% and 5%.

--33. (New) The process of claim 25 wherein the volumetric concentration of said surfactant is between 0.001% and 5%.

--34. (New) The process of claim 18, wherein the volumetric concentration of said surfactant is between 0.01% and 1%.

--35. (New) The process of claim 22, wherein the volumetric concentration of said surfactant is between 0.01% and 1%.

--36. (New) The process of claim 26, wherein the volumetric concentration of said surfactant is between 0.01% and 1%.--

REMARKS

The Official Action of February 14, 2001, Paper No. 5, and the references cited therein have been carefully reviewed. The claims in the application are now claims 17-36, and these claims define patentable subject matter warranting their allowance. Applicants accordingly respectfully request favorable reconsideration and allowance.